AD850 Specifications

I. GPS Performance

1. Processed Channels:	Track up to 44 satellites.	
2. Update rate:	1 second.	
3. Acquisition time	Reacquisition,	0.1 sec., averaged
	Hot start,	1 sec.,averaged **Note 1**
	Warm start,	35 sec., averaged
	Cold start,	40 sec., averaged
4. Accuracy	Position,	5-10 m CEP **Note 2**
	Time,	1 microsecond synchronized GPS time
5. Dynamic Conditions	Altitude,	18,000 meters (60,000 feet) max
	Velocity,	515 meters / second (1000 knots) max
	Acceleration,	4 G max
	Jerk,	20 meters / second cubic, max
6. Datum:	WGS-84	
7. Sensitivity:	-159dBm	

Note 1: Outdoor-clear sky situation

2: Measured over 24 hours

II. Data logger Specifications

1. Up to 120K data records
2. Log data export for Google Earth and track maker
3. Programmable data log interval: time, distance, and velocity
4. Log data download by Bluetooth wireless connection, 10 meters distance.

III. Bluetooth Specification

1. Port type:	compatible with Bluetooth 1.2 serial port profile (SSP)
2. Transmitter power:	class 2
3. Transmission range:	up to 10 meters
4. Frequency range:	2402 MHZ ~ 2483.5 MHZ
5. Hopping channel:	79
6. Modulation:	GFSK
7. Receiver sensitivity:	-80dBm (typical)

IV. External Interface

1. Connection:	Bluetooth 1.2 serial port profile (SSP)
2. Protocol:	Default -- NMEA 0183 format with command set (GPGGA, GPGSA, GPGSV, GPVTG, GPRMC)
3. Baud rate:	115200

V. Physical Dimension

Dimension:	77 (L) x 43 (W) x 17.6 (H) (mm)
Weight:	55 g (with battery)

VI. Environmental Characteristics

Operating temperature:	-10 ℃ to +60 ℃
Storage temperature:	-20 ℃ to +70 ℃
Battery charging temperature:	0℃ to +40 ℃
Humidity range:	5% ~ 95% no condensing

VII. Power Characteristics

Input voltage:	5V DC
Battery:	Rechargeable Li-ion battery
Operating time:	up to 20 hours at battery full charged condition